



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,883	12/05/2003	Todd D. Wakefield	03760.017/5134 P	9202

7590 01/23/2007  
Parsons Behle & Latimer  
Suite 1800  
201 South Main Street  
Salt Lake City, UT 84111

EXAMINER
----------

CAO, PHUONG THAO

ART UNIT	PAPER NUMBER
----------	--------------

2164

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/729,883	WAKEFIELD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Phuong-Thao Cao	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,10,12-17,21,22,26-34,38,39 and 42-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,10,12-17,21,22,26-34,38,39 and 42-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to Amendment filed on 12/01/2006.
2. Claims 1, 4-6, 10, 12, 13, 17, 34, 38, 39 and 42 have been amended, and claims 2, 3, 7-9, 11, 18-20, 23, 25, 35-37, 40, 41, 47 and 48 have been cancelled. Currently, claims 1, 4-6, 10, 12-17, 21, 22, 26-34, 38, 39 and 42-46 are pending.

### ***Terminal Disclaimer***

3. The terminal disclaimer filed on 12/01/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Applicant Number 10/778,721 and any patent granted on Application Number 10/729,889 has been reviewed and is NOT accepted.
4. The terminal disclaimer does not comply with 37 CFR 1.321(b) and/or (c) because:  
  
The application/patent being disclaimed has been improperly identified since the number used to identify the Application (10/778,721) being disclaimed is incorrect. The correct number is 10/728,721.

### ***Double Patenting***

5. In light of claim amendments, the previous double patenting rejections are

Art Unit: 2164

withdrawn.

*Response to Arguments*

6. Applicant's arguments with respect to claims 1-48 have been considered but are moot in view of the new ground(s) of rejection.

*Claim Objections*

7. Claim 28 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 28 claims a system including the computer program product, which does not provide any additional function to the computer program product of claim 17.

8. Claims 4-6, 10, 12-16, 21, 22, 26-33, 38, 38 and 42-46 are rejected as being of improper dependent form. The "A" at the beginning of each claim should be deleted and replaced by the "The".

9. Claims 13, 26 and 42 are objected to because of the following informalities: claim 13 is mislabeled as claim 12, claim 26 depends on the cancelled claim 25, and claim 42 depends on

the cancelled claim 41. It is believed that claim 26 may depend on claim 17, and that claim 42 may depend on claim 38, and treated as such in this action. However, appropriate correction is required.

10. The claims are objected to because the lines are crowded too closely together, making reading difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

*Claim Rejections - 35 USC § 101*

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 1, 4, 12-17, 28-34 and 44-46 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 1, 17 and 34, these claims recite the process of integrating of mix format data, but fail to recite a tangible result.

For a result to be tangible, it must be more than just a thought or a computation; it must have real-world value rather than an abstract result. What has been generated, determined, calculated, selected or decided, etc. without using what has been generated, determined, calculated, selected, decided, etc. in a disclosed practical application or at least making what has

Art Unit: 2164

been generated, determined, calculated, selected, decided, etc. available for use through some form of conveyance (for example, display, print, sound, transmission, etc.) or at least temporary storage somewhere is not considered a tangible result. Processing data in memory such as “performing analytic processing on the integrated data” as amended is not considered as tangible result. Note that the limitations of claims 5, 6, 10, 21, 22, 26, 27, 38, 39, 42 and 43 are not rejected, since they recite the function of storing the data resulting from the production step in a database or a file which are assumed to be stored in a storage medium not working or volatile memory.

Claims 4, 12-16, 28-33 and 44-46 are rejected as incorporating the deficiencies of claims 1, 17 and 34 upon which they depend respectively.

*Claim Rejections - 35 USC § 102*

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1, 5, 6, 10, 12, 13, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Rao et al. (Publication No US 2003/0120458).

As to claim 1, Rao et al. teaches:

“A computer program product located on one or more storage media devices usable to perform integration of mixed format data” (see Abstract and Fig. 3), said computer program product comprising instructions executable by a computer to perform the functions of:

“accessing a database on computer-readable storage media containing data records, at least some data records containing both structured and unstructured data, the unstructured data including free text that has information relatable to the structured data contained in the same data record where the particular free text is found” (see Fig. 2-3, [0008], [0018], [0033]-[0035] wherein CPR system (310) is equivalent to Applicant’s “database”, and each patent medical record is equivalent to Applicant’s “data record”);

“using linguistic information contained in the free text to extract multi-dimensional relational facts from the free text, each multi-dimensional relational fact including a plurality of attributes concerning the free text from which it was extracted” (see [0042] and [0043] wherein any text source or combination of many text sources in the patient medical record can be considered as equivalent to Applicant’s “free text”, probabilistic assertions (elements) about a patient and produced from the extraction component are equivalent to Applicant’s “multi-dimensional relational facts”, each element includes a plurality of attributes such as “name”, “value” and “confidence”);

“producing a set of construed data of said multi-dimensional relational facts, each construed datum relatable to the structured data from the same data record that the free text originated from” (see [0035]-[0037] and [0042] wherein probabilistic assertions are equivalent to



Art Unit: 2164

Applicant's "multi-dimensional relational facts", a set of patient states is equivalent to Applicant's "a set of construed data", and each patient state is related to the particular patient medical record as well as other structured data in the same patient medical record);

"integrating the produced data with the structured data" (see Fig. 3 and [0070]-[0071] wherein the structured CPR including both mined patient information (Applicant's "produced data") and patient information including personal information such as patient identification, etc. (Applicant's "structured data")); and

"performing analytic processing on the integrated data" (see [0071]).

As to claim 5, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. teaches:

"producing a new database containing the integrated data" (see Abstract, Fig. 3 and [0071] wherein structured CPR is equivalent to Applicant's "new database").

As to claim 6, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. teaches:

"inserting the produced data into the database of structured data while performing said integrating step" (see Abstract, Fig. 3, [0035] and [0071] wherein structured CPR is equivalent to Applicant's "database of structured data").



As to claim 10, this claim is rejected based on arguments given above for rejected claim 5 and is similarly rejected including the following:

Rao et al. teach:

“produce a file having a format selected from the group of XML, character separated values, spreadsheet formats and file-based database structure” (see Fig. 2 for file-based database structures).

As to claim 12, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. teaches:

“combine similar attributes for the extracted relational facts” (see [0053]).

As to claim 13, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. teaches:

“combine similar relation types for the extracted relational fact produced in performing said extracting relational facts from the free text” (see [0060]-[0066] wherein each probabilistic observations represent relation types of extracted information regarding if patient has diabetes).

As to claim 15, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. teaches:

“store the relational facts produced in performing said extracting relational facts from the free text” (see [0035]-[0037], [0043] and [0070] wherein mined information is equivalent to Applicant’s “relational facts”).

As to claim 16, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. teaches:

“wherein the extracted relational facts produced in performing said extracting relational facts and the integrated data produced by the performance of said integrating the produced data including reference information to the original free text” (see [0071] wherein information to identify individual patient represent a reference from information of a patient in the structured CPR (equivalent to Applicant’s “extracted relational facts” and “integrated information”) to the patient record in the CPR (equivalent to Applicant’s “original free text”)).

### ***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2164

16. Claims 4, 14, 17, 21, 22, 26-34, 38, 39, 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao et al. (Publication No US 2003/0120458) in view of Gaizauskas et al. ("Information Extraction: Beyond Document Retrieval", 1998).

As to claim 4, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. does not teach:

"applying caseframes while performing said extracting said extracting step".

Gaizauskas et al. teaches:

"applying caseframes while performing said extracting said extracting step" (see [page 22, paragraph 3] and [page 23, first paragraph]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rao et al. by the teaching of Gaizauskas et al. to add the features of applying caseframes while performing said extracting said extracting step since both Rao et al. and Gaizauskas et al. pursue in the field of generating structured data from text and adding these features provides more effective system because it is well known in the art that conceptual natural language processing systems usually rely on case frame instantiation to recognize events and role objects in text and the case frames generate more cohesive output and produce fewer false hits than the original extraction patterns.

As to claim 14, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. as modified does not teach:

“provide relational facts with domain roles applied in performing said extracting relational facts”.

Gaizauskas et al. teaches:

“provide relational facts with domain roles applied in performing said extracting relational facts” (see [page 22, last paragraph] for the disclosure of what was to be extracted were roles in particular historical events); and

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rao et al. by the teaching of Gaizauskas et al. to add the feature of assigning domain roles to the extractions since both Rao et al. and Gaizauskas et al. pursue in the field of generating structured data from text and adding this feature provides the system an effective way to identifying the types of information that need to be recognized.

As to claim 17, Rao et al. teaches:

“A computer program product located on one or more storage media devices usable to perform integration of mixed format data” (see Abstract and Fig. 3), said computer program product comprising instructions executable by a computer to perform the functions of:

“accessing a database on computer-readable storage media containing data records, at least some data records containing both structured and unstructured data, the unstructured data including free text that has information relatable to the structured data contained in the same data record where the particular free text is found” (see Fig. 2-3, [0008], [0018], [0033]-[0035])

Art Unit: 2164

wherein CPR system (310) is equivalent to Applicant's "database", and each patent medical record is equivalent to Applicant's "data record");

"using linguistic information contained in the free text to extract multi-dimensional relational facts from the free text, each multi-dimensional relational fact including a plurality of attributes concerning the free text from which it was extracted" (see [0042] and [0043] wherein any text source or combination of many text sources in the patient medical record can be considered as equivalent to Applicant's "free text", probabilistic assertions (elements) about a patient and produced from the extraction component are equivalent to Applicant's "multi-dimensional relational facts", each element includes a plurality of attributes such as "name", "value" and "confidence");

"producing a set of construed data of said multi-dimensional relational facts, each construed datum relatable to the structured data from the same data record that the free text originated from" (see [0035]-[0037] and [0042] wherein probabilistic assertions are equivalent to Applicant's "multi-dimensional relational facts", a set of patient states is equivalent to Applicant's "a set of construed data", and each patient state is related to the particular patient medical record as well as other structured data in the same patient medical record);

"integrating the produced data with the structured data" (see Fig. 3 and [0070]-[0071] wherein the structured CPR including both mined patient information (Applicant's "produced data") and patient information including personal information such as patient identification, etc. (Applicant's "structured data")); and

"performing analytic processing on the integrated data" (see [0071]).

Rao et al. does not teach:

“using caseframes to extract multi-dimensional relational facts from the free text”.

Gaizauskas et al. teaches:

“using caseframes to extract multi-dimensional relational facts from the free text” (see [page 22, paragraph 3] and [page 23, first paragraph]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rao et al. by the teaching of Gaizauskas et al. to add the features of applying caseframes while performing said extracting said extracting step since both Rao et al. and Gaizauskas et al. pursue in the field of generating structured data from text and adding these features provides more effective system because it is well known in the art that conceptual natural language processing systems usually rely on case frame instantiation to recognize events and role objects in text and the case frames generate more cohesive output and produce fewer false hits than the original extraction patterns.

As to claim 21, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Rao et al. as modified teaches:

“producing a new database containing the integrated data produced by said integrating” (see Abstract, Fig. 3 and [0071] wherein structured CPR is equivalent to Applicant’s “new database”).

As to claim 22, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Rao et al. as modified teaches:

“inserting the produced data into the database of structured data while performing said integrating the produced data” (see Abstract, Fig. 3, [0035] and [0071] wherein structured CPR is equivalent to Applicant’s “database of structured data”).

As to claim 26, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Rao et al. as modified teaches:

“produce a file containing the integrated data produced by said integrating” (see [0070]-[0071] wherein the structured CPR is equivalent to Applicant’s “file”).

As to claim 27, this claim is rejected based on arguments given above for rejected claim 26 and is similarly rejected including the following:

Rao et al. as modified teach:

“produce a file having a format selected from the group of XML, character separated values, spreadsheet formats and file-based database structure” (see Fig. 2 for file-based database structures).

As to claim 28, this claim is rejected based on arguments given above for rejected claim 17, and is similarly rejected including the following:

Rao et al. as modified teaches:



“a computer system including a computer program product according to claim 17, further comprising: a processing unit coupled to said one or more storage media devices, said processing unit being capable of executing said instructions, and an execution command unit, whereby operation of said instructions and said processing unit may be commanded or controlled” (see [0026]-[0030]).

As to claim 29, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Rao et al. as modified teaches:

“combine like attributes for the extracted relational facts produced in performing said extracting relational facts from the free text” (see [0053]).

As to claim 30, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Rao et al. as modified teaches:

“combine like relation types for the extracted relational fact produced in performing said extracting relational facts from the free text” (see [0060]-[0066] wherein each probabilistic observations represent relation types of extracted information regarding if patient has diabetes).

As to claim 31, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Rao et al. as modified does not teach:

“provide relational facts with domain roles applied in performing said extracting relational facts from the free text”.

Gaizauskas et al. teaches:

“provide relational facts with domain roles applied in performing said extracting relational facts from the free text” (see [page 22, last paragraph] for the disclosure of what was to be extracted were roles in particular historical events); and

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rao et al. by the teaching of Gaizauskas et al. to add the feature of assigning domain roles to the extractions since both Rao et al. and Gaizauskas et al. pursue in the field of generating structured data from text and adding this feature provides the system an effective way to identifying the types of information that need to be recognized.

As to claim 32, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Rao et al. as modified teaches:

“store the relational facts produced in performing said extracting relational facts from the free text” (see [0035]-[0037], [0043] and [0070] wherein mined information is equivalent to Applicant’s “relational facts”).

As to claim 33, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Rao et al. as modified teaches:

Art Unit: 2164

“wherein the extracted relational facts produced in performing said extracting relational facts and the integrated data produced by the performance of said integrating the produced data including reference information to the original free text” (see [0071] wherein information to identify individual patient represent a reference from information of a patient in the structured CPR (equivalent to Applicant’s “extracted relational facts” and “integrated information”) to the patient record in the CPR (equivalent to Applicant’s “original free text”)).

As to claim 34, Rao et al. teaches:

“A method for integrating mixed format data” (see Abstract and Fig. 3), comprising the steps of:

“accessing a database on computer-readable storage media containing data records, at least some data records containing both structured and unstructured data, the unstructured data including free text that has information relatable to the structured data contained in the same data record where the particular free text is found” (see Fig. 2-3, [0008], [0018], [0033]-[0035] wherein CPR system (310) is equivalent to Applicant’s “database”, and each patent medical record is equivalent to Applicant’s “data record”);

“using linguistic information contained in the free text to extract multi-dimensional relational facts from the free text, each multi-dimensional relational fact including a plurality of attributes concerning the free text from which it was extracted” (see [0042] and [0043] wherein any text source or combination of many text sources in the patient medical record can be considered as equivalent to Applicant’s “free text”, probabilistic assertions (elements) about a patient and produced from the extraction component are equivalent to Applicant’s “multi-

Art Unit: 2164

dimensional relational facts”, each element includes a plurality of attributes such as “name”, “value” and “confidence”); and

“integrating the multi-dimensional relational facts with the structured data” (see Fig. 3 and [0070]-[0071] wherein the structured CPR including both mined patient information (Applicant’s “multi-dimensional relational facts”) and patient information to identify an individual patient at least patient ID (Applicant’s “structured data”)).

Rao et al. does not teach:

“using caseframe application to extract multi-dimensional relational facts from the free text”.

Gaizauskas et al. teaches:

“using caseframe application to extract multi-dimensional relational facts from the free text” (see [page 22, paragraph 3] and [page 23, first paragraph]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rao et al. by the teaching of Gaizauskas et al. to add the features of applying caseframes while performing said extracting said extracting step since both Rao et al. and Gaizauskas et al. pursue in the field of generating structured data from text and adding these features provides more effective system because it is well known in the art that conceptual natural language processing systems usually rely on case frame instantiation to recognize events and role objects in text and the case frames generate more cohesive output and produce fewer false hits than the original extraction patterns.

As to claim 38, this claim is rejected based on arguments given above for rejected claim 34 and is similarly rejected including the following:

Rao et al. as modified teaches:

“producing a new database containing the integrated data” (see Abstract, Fig. 3 and [0071] wherein structured CPR is equivalent to Applicant’s “new database”).

As to claim 39, this claim is rejected based on arguments given above for rejected claim 34 and is similarly rejected including the following:

Rao et al. as modified teaches:

“inserting the produced data into the database of structured data” (see Abstract, Fig. 3, [0035] and [0071] wherein structured CPR is equivalent to Applicant’s “database of structured data”).

As to claim 42, this claim is rejected based on arguments given above for rejected claim 38 and is similarly rejected including the following:

Rao et al. as modified teaches:

“wherein new database includes at least one file containing the integrated data produced by said integrating” (see Fig. 2 and [0034] for structure of a CPR including at least a file).

As to claim 43, this claim is rejected based on arguments given above for rejected claim 42 and is similarly rejected including the following:

Rao et al. as modified teach:

“produce the new database having a format selected from the group of XML, character separated values, spreadsheet formats and file-based database structure” (see Fig. 2 for file-based database structures of CPR).

As to claim 44, this claim is rejected based on arguments given above for rejected claim 34 and is similarly rejected including the following:

Rao et al. as modified teaches:

“combine like attributes for the extracted relational facts produced in performing said extracting relational facts from the free text” (see [0053]).

As to claim 45, this claim is rejected based on arguments given above for rejected claim 34 and is similarly rejected including the following:

Rao et al. as modified teaches:

“combine like relation types for the extracted relational fact produced in performing said extracting relational facts from the free text” (see [0060]-[0066] wherein each probabilistic observations represent relation types of extracted information regarding if patient has diabetes).

As to claim 46, this claim is rejected based on arguments given above for rejected claim 34 and is similarly rejected including the following:

Rao et al. as modified does not teach:

“wherein domain roles are applied in said step of extracting relational facts from the free text”.

Gaizauskas et al. teaches:

“wherein domain roles are applied in said step of extracting relational facts from the free text” (see [page 22, last paragraph] for the disclosure of what was to be extracted were roles in particular historical events); and

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rao et al. by the teaching of Gaizauskas et al. to add the feature of applying domain roles to the extractions since both Rao et al. and Gaizauskas et al. pursue in the field of generating structured data from text and adding this feature provides the system an effective way to identifying the types of information that need to be recognized.



*Conclusion*

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong-Thao Cao whose telephone number is (571) 272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Art Unit: 2164

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PTC

January 19, 2007

  
CHARLES RONES  
SUPERVISORY PATENT EXAMINER

 22 January 2007